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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/917,952 | 07/31/2001 | Catharine Anne Maple | 1509-211 | 1535 |

22879 7590 07/26/2005

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EXAMINER

DAVIDSON, DAN

ART UNIT

PAPER NUMBER

2651

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/917,952 | MAPLE ET AL. | |
| | Examiner | Art Unit | |
| | Dan I. Davidson | 2651 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-21,30-36 and 49-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-21,51,53 and 56 is/are allowed.
- 6) ☒ Claim(s) 30-36,49,50,52,54 and 55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed March 28, 2005 has been received and has been made of record. An Office Action in response to the above amendment follows.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 30-36, 49-50, 52, and 54-55 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re claims 31 and 36; the final limitation at each of the respective claims, namely that the bits of the predetermined bit pattern are changed so the bits of the predetermined bit pattern are the same as the bits of the at least one read synchronization field, is not present in the specification as originally filed and thus constitutes new matter. Claims 32-35 are rejected since they depend on claim 32.

Re claims 49 and 50, lines 30-32, respectively; the resynchronization field is not enabled in response to the detection of the predetermined pattern of the second non-user data when the medium is moving in the forward direction; rather, it is enabled in response to detection of the presence of a VFO field as correctly argued by Applicant. Although the predetermined pattern of the second non-user data is a VFO field, it is

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particular to the VFO field that follows the back synchronization field in the direction of forward reading (claims 49 and 50, lines 18-19, respectively), and thus would not be read to enable the resynchronization field when the medium is moving in the forward direction as claimed by Applicant. Applicant's claim therefore constitutes new matter. Claims 30, 52, and 54-55 depend on either claim 49 or claim 50 and accordingly are rejected.

4. Claims 30-36, 49-50, 52, and 54-55 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Since the last limitation at claims 31 and 36, respectively, and the limitation drawn to the resync field in claims 49 and 50, respectively, are not present in the specification as originally filed, it follows that the limitations contain subject matter not described in the specification so as to enable one of skill in the art to make and/or use the invention.

Allowable Subject Matter

5. Claims 4-21, 51, 53, and 56 are allowed over the prior art of record.

Re claim 6; the prior art of record, and in particular Blaum (US 5,999,110 A), fails to teach or suggest enabling sync detection only in response to the predetermined pattern being detected.

Re claim 8; the prior art of record, and in particular Malone, Sr. (US 5,940,233 A) and Esumi (US 6,707,626 B2), fails to teach or suggest all the limitations present in this claim. Malone, Sr. fails to teach determining that the sync pattern has been detected by detecting at least one of the sync bytes, the sync bytes being configurable. Esumi fails to teach detecting the at least one synchronization field.

Re claim 11; the prior art of record, and in particular Malone, Sr. (US 5,940,233 A), fails to teach or suggest determining that the sync pattern has been detected by detecting at least one of the sync bytes, and that detection of each of the sync bytes is carried out using at least one mask register.

Re claim 14; the prior art of record, and in particular Blaum et al (US 5,999,110 A) and Malone, Sr. (US 5,940,233 A), fails to teach or suggest all the limitations present in this claim. Blaum et al fail to teach or suggest splitting the sync pattern into at least two sync bytes, and determining that the sync pattern has been detected by detecting at least one of the sync bytes. Malone, Sr. fails to teach or suggest determining that the sync pattern has been detected by detecting at least one of the sync bytes, and a back sync field positioned after the second codeword pair.

Re claim 20; the prior art of record, and in particular Blaum et al (US 5,999,110 A), fails to teach or suggest that the sync pattern detection is qualified by using a window and considering as a true sync pattern any sync pattern detected while the window is open, and considering as a spurious sync pattern any sync pattern detected while the window is closed.

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Re claim 51; the prior art of record, and in particular Blaum et al (US 5,999,110 A), fails to teach or suggest while the medium is moving in the forward direction: enabling reading of the forward synchronization field in response to detection of the presence of the predetermined pattern of the first non-user data without interaction with any forward or backward synchronization fields of the medium; and while the medium is moving in the backward direction: enabling reading of the back synchronization field in response to detection of the presence of the predetermined pattern of the second non-user data without interaction with any forward or backward synchronization fields of the medium.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Esumi (US 6,707,626 B2) teaches dividing a reproduced sync pattern into a plurality of groups, and outputting a sync detected signal when the symbols of at least one of the divided groups match the symbol of the sync pattern.

7. Since this Office Action contains new rejections, it will not be final.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan I. Davidson whose telephone number is (571) 272-7552. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

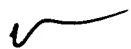
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth, can be reached on (571) 272-7843. The fax phone

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number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Dan I Davidson
July 18, 2005


DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600